

## CLAIMS

### WHAT IS CLAIMED:

1. An method, comprising:

receiving data indicative of acoustic conditions proximate to an audio presentation

5 device;

receiving data associated with at least one audio profile; and

determining acoustic data to be provided based on at least a portion of the received data  
indicative of acoustic conditions proximate to the audio presentation device and at least a portion  
of the data associated with the at least one audio profile.

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2. The method of claim 1, wherein determining the acoustic data comprises determining a  
close caption corresponding to an acoustic signal.

3. The method of claim 1, wherein receiving the data indicative of acoustic conditions  
proximate to the audio presentation device comprises receiving the data from at least one  
15 acoustic detector deployed proximate to the audio presentation device.

4. The method of claim 3, wherein receiving the data indicative of acoustic conditions  
proximate to the audio presentation device comprises providing an acoustic test signal.

5. The method of claim 4, wherein receiving the data indicative of acoustic conditions  
proximate to the audio presentation device comprises receiving a portion of the acoustic test  
20 signal from the acoustic detector.

6. The method of claim 5, wherein receiving the data indicative of acoustic conditions proximate to the audio presentation device comprises receiving an acoustic noise signal from the acoustic detector.

7. The method of claim 6, wherein determining the acoustic data to be provided comprises  
5 determining a signal-to-noise ratio using the received portion of the acoustic test signal and the received acoustic noise signal.

8. The method of claim 7, wherein receiving the audio profile comprises receiving an indication of at least one deficiency in the hearing of a user.

9. The method of claim 8, wherein determining the acoustic data to be provided comprises  
10 comparing the indication of at least one deficiency in the hearing of the user to the determined signal-to-noise ratio.

10. The method of claim 1, further comprising determining that a new user is using the audio presentation device, and wherein receiving the audio profile comprises receiving the audio profile in response to determining that the new user is using the audio presentation device.

15 11. The method of claim 1, wherein receiving the audio profile comprises receiving at least one of a user profile and a device profile, and wherein receiving the audio profile comprises receiving at least one of a Composite Capabilities/Preferences Profile and a Learner Profile.

12. The method of claim 1, wherein determining the acoustic data comprises:  
determining the acoustic data using a processor-based device located remotely from the  
audio presentation device; and  
providing the acoustic data from the processor-based device to the audio presentation  
device.

5 13. An apparatus, comprising:

an interface; and

a control unit coupled to the interface and adapted to:

10 receive data indicative of acoustic conditions proximate to an audio presentation

device;

receive data associated with at least one audio profile; and

determine acoustic data to be provided based on at least a portion of the received  
data indicative of acoustic conditions proximate to the audio presentation  
device and at least a portion of the data associated with the at least one  
audio profile.

15 14. The apparatus of claim 13, further comprising a display device, and wherein the control  
unit is adapted to determine a close caption to be provided by the display device based on at least  
the portion of the received data indicative of acoustic conditions proximate to the audio  
20 presentation device and the portion of the data associated with the at least one audio profile.

15. The apparatus of claim 13, wherein the at least one audio presentation device is adapted to provide the determined acoustic data as an acoustic signal.

16. The apparatus of claim 15, wherein the control unit coupled to the interface is adapted to provide a signal indicative of the determined acoustic data to the audio presentation device.

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17. The apparatus of claim 13, wherein the audio presentation device is at least one of a personal data assistant, a laptop computer, a desktop computer, a cellular telephone, a global positioning system, an automobile navigation system, a projection device, a radio, an MP3 player, and a television.

10 18. The apparatus of claim 13, further comprising at least one detector for acquiring the data indicative of acoustic conditions proximate to the at least one audio presentation device.

19. The apparatus of claim 18, wherein the at least one audio presentation device comprises at least one audio presentation device adapted to provide an acoustic test signal, and wherein the at least one detector is adapted to receive a portion of the acoustic test signal, and wherein the at 15 least one detector is adapted to receive a portion of an acoustic noise signal.

20. The apparatus of claim 19, wherein the control unit is adapted to receive a signal indicative of a portion of the received test noise signal and a portion of the received acoustic noise signal from the acoustic detector.

21. The apparatus of claim 20, wherein the control unit is adapted to determine a signal-to-noise ratio using the signal indicative of the received portion of the acoustic test signal and the received acoustic noise signal.

22. The apparatus of claim 21, wherein the control unit is adapted to determine that a user  
5 has at least one hearing deficiency.

23. The apparatus of claim 22, wherein the control unit is adapted to determine the acoustic data to be provided by comparing the user's hearing deficiency to the signal-to-noise ratio.

24. The apparatus of claim 13, further comprising at least one storage device for storing at least one audio profile database containing the at least one audio profile, and wherein the storage  
10 device is at least one of a local storage medium coupled to the control unit and a remote storage medium coupled to the interface.

25. An apparatus, comprising:

means for receiving data indicative of acoustic conditions proximate to an audio presentation device;

15 means for receiving data associated with at least one audio profile; and

means for determining acoustic data to be provided based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation device and at least a portion of the data associated with the at least one audio profile.

26. A system, comprising:

at least one audio presentation device;

at least one storage device adapted to store at least one audio profile;

at least one detector for acquiring data indicative of acoustic conditions proximate to the

5 at least one audio presentation device; and

a processor-based device adapted to:

receive the data indicative of acoustic conditions proximate to the audio

presentation device;

receive data associated with at least one audio profile; and

10 determine acoustic data to be based on at least a portion of the received data

indicative of acoustic conditions proximate to the audio presentation

device and at least a portion of the data associated with the at least one

audio profile.

27. The system of claim 26, further comprising at least one display device, and wherein the

15 processor-based device is adapted to determine a close caption corresponding to the acoustic data

to be displayed on the display device

28. The system of claim 26, wherein the audio presentation device is at least one of a

personal data assistant, a laptop computer, a desktop computer, a cellular telephone, a global

positioning system, an automobile navigation system, a projection device, a radio, an MP3

20 player, and a television.

29. A computer program product in a computer readable medium which when executed by a processor performs the steps comprising:

receiving the data indicative of acoustic conditions proximate to the audio presentation device;

5 receiving data associated with at least one audio profile; and

determining acoustic data to be based on at least a portion of the received data indicative of acoustic conditions proximate to the audio presentation device and at least a portion of the data associated with the at least one audio profile.

30. The product of claim 29, wherein the computer program product when executed by the

10 processor performs the steps comprising providing an acoustic test signal.

31. The product of claim 30, wherein the computer program product when executed by the processor performs the steps comprising receiving a portion of the acoustic test signal from an acoustic detector.

32. The product of claim 31, wherein the computer program product when executed by the

15 processor performs the steps comprising receiving an acoustic noise signal from the acoustic detector.

33. The product of claim 32, wherein the computer program product when executed by the processor performs the steps comprising determining a signal-to-noise ratio using the received portion of the acoustic test signal and the received acoustic noise signal.

34. The product of claim 33, wherein the computer program product when executed by the processor performs the steps comprising receiving an indication of at least one deficiency in hearing of a user.

35. The product of claim 34, wherein the computer program product when executed by the  
5 processor performs the steps comprising comparing the indication of at least one deficiency in the hearing of the user to the determined signal-to-noise ratio.